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(12) United States Patent

Hammon et al.

(54) PLANT AND PROCESS FOR PERFORMANCE OF HETEROGENEOUSLY CATALYZED GAS PHASE REACTIONS

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(57) ABSTRACT

The present invention relates to a plant for performance of heterogeneously catalyzed gas phase reactions. The plant entails a reactor, at least one line leading into the reactor for introduction of reactants into the reactor, at least one first feed for providing at least one first reactant A, which leads into the line, at least one second feed for providing at least one second reactant B, which leads into the line, at least one third feed for providing a cycle gas G, which leads into the line, a temperature control unit which is disposed in the line upstream of the reactor and is for controlling the temperature of the first reactant A and/or second reactant B and/or cycle gas G prior to entry into the reactor and at least one outlet for products, by-products and/or unreacted reactants from the gas phase reaction.

12 Claims, 2 Drawing Sheets

